Section 1. Registration Information

Source Identification

Facility Name:	Tolleson Wastewater Treatment Plant
Parent Company #1 Name:	City of Tolleson
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	5-year update (40 CFR 68.190(b)(1))
Description:	
Receipt Date:	07-Jul-2010
Postmark Date:	07-Jul-2010
Next Due Date:	07-Jul-2015
Completeness Check Date:	07-Jul-2010
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0006 6563
Other EPA Systems Facility ID:	

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	
Parent Company #1 DUNS:	
Parent Company #2 DUNS:	

Facility Location Address

Street 1:	9501 West Pima
Street 2:	
City:	Tolleson
State:	ARIZONA
ZIP:	85353
ZIP4:	
County:	MARICOPA

Facility Latitude and Longitude

Latitude (decimal):	33.431000
Longitude (decimal):	-112.260800
Lat/Long Method:	Address Matching - Other
Lat/Long Description:	Center of Facility
Horizontal Accuracy Measure:	15
Horizontal Reference Datum Name:	North American Datum of 1983
Source Map Scale Number:	

Owner or Operator

Operator Name:	City of Tolleson
Operator Phone:	(623) 936-3381

Mailing Address

Operator Street 1:	9555 West Van Buren
Operator Street 2:	
Operator City:	Tolleson
Operator State:	ARIZONA
Operator ZIP:	85353
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Mark Berrelez
RMP Title of Person or Position:	Utilities Director
RMP E-mail Address:	mberrelez@tollesonaz.org

Emergency Contact

Emergency Contact Name:	Mark Berrelez
Emergency Contact Title:	Utilities Director
Emergency Contact Phone:	(623) 478-8721
Emergency Contact 24-Hour Phone:	(623) 680-1184
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	mberrelez@tollesonaz.org

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	
Facility or Parent Company WWW Homepage Address:	

Local Emergency Planning Committee

LEPC:	Maricopa County LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	40
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	
Air Operating Permit ID:	

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	18-Jun-2003
Last Safety Inspection Performed By an External Agency:	OSHA

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:
Preparer Phone:
Preparer Street 1:
Preparer Street 2:
Preparer City:
Preparer State:
Preparer ZIP:
Preparer ZIP4:
Preparer Foreign State:
Preparer Foreign Country:
Preparer Foreign ZIP:

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

Process Chemicals

Process ID:	1000010986
Description:	22132
Process Chemical ID:	1000012511
Program Level:	Program Level 3 process
Chemical Name:	Chlorine
CAS Number:	7782-50-5
Quantity (lbs):	12000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000010986
Process NAICS ID:	1000011387
Program Level:	Program Level 3 process
NAICS Code:	22132
NAICS Description:	Sewage Treatment Facilities

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000009274

Percent Weight:	99.5
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Rural

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000010178

Percent Weight:	99.5
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Rural

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Active Mitigation Considered

Sprinkler System:	
Deluge System:	
Water Curtain:	
Neutralization:	
Excess Flow Valve:	
Flares:	
Scrubbers:	
Emergency Shutdown:	Yes
Other Type:	

Section 4. Flammables: Worst Case

No records found.

Section 5. Flammables: Alternative Release

No records found.

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

No description available.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000010356
Chemical Name:	Chlorine
Flammable/Toxic:	Toxic
CAS Number:	7782-50-5
Prevention Program Level 3 ID:	1000008945
NAICS Code:	22132

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	29-Jun-2010

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	10-May-2007

The Technique Used

What If:	Yes
Checklist:	
What If/Checklist:	Yes
HAZOP:	
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	01-Jun-2007

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes
Earthquake:	
Floods (Flood Plain):	

Tornado:
Hurricanes:
Other Major Hazard Identified:

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	Yes
Backup Pump:	
Grounding Equipment:	Yes
Inhibitor Addition:	
Rupture Disks:	Yes
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	
Dikes:	
Fire Walls:	Yes
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	
Neutralization:	
None:	
Other Mitigation System in Use:	

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:	Yes
Increase in Chemical Inventory:	
Change Process Parameters:	
Installation of Process Controls:	
Installation of Process Detection Systems:	

Installation of Perimeter Monitoring Systems:	Yes
Installation of Mitigation Systems:	
None Recommended:	
None:	
Other Changes Since Last PHA or PHA Update:	Upgraded monitoring system to Capitol Controls Model 1620B Multiport Gas Detector on 5/11/07

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	28-Jun-2010

Training

Training Revision Date (The date of the most recent review or revision of training programs):	29-Jun-2010

The Type of Training Provided

Classroom:	Yes
On the Job:	Yes
Other Training:	

The Type of Competency Testing Used

Written Tests:	Yes
Oral Tests:	
Demonstration:	Yes
Observation:	Yes
Other Type of Competency Testing Used:	

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	06-Jul-2010
Equipment Inspection Date (The date of the most recent equipment inspection or test):	06-Jul-2010
Equipment Tested (Equipment most recently inspected or tested):	chlorinators, regulators, rotometers

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	
Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	01-Jul-2010

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	01-Jul-2010
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	30-Jun-2011

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	01-Jul-2010

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	01-Apr-2009

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	01-Apr-2009
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	

Confidential Business Information

CBI Claimed:	

Section 8. Program Level 2

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):	Yes
Facility Plan (Does facility have its own written emergency response plan?):	Yes
Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):	Yes
Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):	Yes
Healthcare (Does facility's ER plan include information on emergency health care?):	Yes

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan):	01-Jul-2010

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees):	29-Feb-2008

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated):	Tolleson Dept. of Safety Services
Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):	(623) 936-8500

Subject to

OSHA Regulations at 29 CFR 1910.38:	Yes
OSHA Regulations at 29 CFR 1910.120:	
Clean Water Regulations at 40 CFR 112:	Yes
RCRA Regulations at CFR 264, 265, and 279.52:	
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:	
State EPCRA Rules or Laws:	Yes
Other (Specify):	

Executive Summary

INTRODUCTION

The AccidentalRelease Prevbention Risk Management Program Rule (40 CFR Part 68) is similar to the Occupational Safety and Health Administration's Process Safety Management Program, which is designed to protect workers from accidental releases of hazardous substances. The Risk Management Program rule addresses over 100 chemical substances--77 of which are acutely toxic and 63 of which are flamable gases--and the accidental release of these substances. The United States Enviromental Protection Agency (USEPA) estimates that over 100,000 sources are covered by the rule, including chemical manufacturers and wholesalers, certain retailers, potable water treatment systems, wastewater treatment plants, ammonia refrigeration systems, and federal facilities.

The Tolleson Wastewater Treatment Plant (WWTP) falls under this regulation because of the on-site storage of chlorine. The amount of chlorine stored is above the threshold limit specified by the USEPA thereby making the facility subject to compliance with the regulation. Additionally, in light of potential hazards, the City of Tolleson has completed a risk management plan for its onsite use of methane generated as a natural process in the biodegradation of wastewater treatment solids. The Tolleson WWTP personnel have complied with the USEPA Risk Management Program rule and have completed an Accidental Release Prevention Program (ARPP) Plan that contains the following required Information:

. Management System

. A hazard assesssment that establishes the worst-case and alternate release scenarios and their impact on the population and the enviroment (40 CFR Part 68 Subpart B).

. A prevention program that includes safety information, a hazard review, operating procedures, training,maintenance, compliance audits, and incident investigations. (40 CFR Part 68 Subpart D)

Â· An emergency response plan (40 CFR Part 68 Subpart E)

The following subsections discuss details of the plan that has been implemented at the Tolleson WWTP.

RELEASE PREVENTION AND EMERGENCY RESPONSE POLICIES

The Tolleson WWTP facility in Tolleson, Arizona has an excellent record in preventing and minimizing releases of chlorine and methane.

The emergency response policies at this facility ensure that there is emergency response coverage 24 hours per day, 7 days per week. There are also adequate provisions for coordination with outside agencies, such as the Tolleson Fire Department in the event of an emergency. In the event of a release, plant staff will contact the Tolleson Fire Department, relaying information regarding the release prior to implementing plant evacuation to a location outside the plant entrance, awaiting the arrival of the fire department to inform its personnel of all information about the release and to provide assurance that the plant has been totally evacuated.

REGULATED SUBSTANCE

The Tolleson WWTP uses chlorine to disinfect treated wastewater. The plant routinely has up to six full and three empty one ton containers of chlorine onsite. This is above the threshold limit (2,500 pounds) set by the USEPA.

PROCESS DESCRIPTION

The Tolleson WWTP receives raw wastewater from a variety of residential and commercial users within the City of Tolleson and Sun City. The wastewater is treated through a conventional treatment process and then disinfected with chlorine. Plant solids removed in the treatment process are anaerobically digested, producing as a byproduct, methane gas. Chlorine gas is delivered to the site in multiple one ton pressurized containers. The chlorine is then removed through a vacuum system, pulling the chlorine gas from the cylinders through the chlorine feeders that regulate the flow to the proportion of wastewater being treated.
release scenario.

GENERAL ACCIDENTAL RELEASE PRECAUTION PROGRAM

The Tolleson WWTP carries out consistent operation and maintenance of its chlorine equipment utilizing only fully trained personnel in this area. Tolleson WWTP management enforces consistent operation through discipline for operational deviations.

FIVE-YEAR ACCIDENT HISTORY

The Tolleson WWTP's accident history was reviewed for a period from July, 2004, through July, 2010. During this period of time, no accidental releases of chlorine had occurred.

EMERGENCY RESPONSE PROGRAM

As mentioned earlier, this facility has developed an Emergency Response Program involving immediate plant evacuation once the City's Fire Department is called to implement response and repair to leaking chlorine gas. The plant is staffed 24 hours per day and 7 days per week. Plant operators are required to make rounds for inspection and monitoring of the plant processes at least every two hours. Accordingly, plant staff will detect any releases of chlorine and the Fire Department is trained to respond to this situation.

The Emergency Response Plan includes: (1) procedures to follow in the event of a chlorine emergency, (2) information about the plant evacuation plan, and (3) a detailed description of the emergency responder's plan for handling such an emergency.

The Tolleson Fire Department has been designated to provide emergency responders and equipment, and will assume Incident Command upon arrival to the plant's emergency call.

PLANNED CHANGES TO IMPROVE SAFETY

Based on the hazard review and prevention evaluation completed for chlorine, a list of action items was developed and is being considered by Tolleson WWTP management to determine if implementation is to be accomplished. The most notable planned changes include the following:

Â· In the future when the plant facilities are expanded or upgraded, consideration should be given to design and construction of a containment building to encompass the chlorine storage tanks designed in conjunction with the capability to chemically neutralize any accidental releases of chlorine. This option might be compared with the conversion to a nongaseous disinfection alternative.